

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY JOHN AUERBACH

COMMISSIONER

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

11/18/2011

David McGowan
Assistant District Attorney, Suffolk County

Dear ADA McGowan,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Lisa Glazer.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Lisa Glazer was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Lisa A. Glazer

Education

Bachelor of Science Degree, CHEMISTRY January 2006

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006

UNIVERSITY OF NEW HAVEN

Coursework Included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

Employment

Chemist I. II State Laboratory Institute

(May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

Laboratory Technician I (August 2006 - May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- > Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- > Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 - November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

Trainings

Multijurisdictional Counterdrug Task Force Training (May 20, 2008) Current Drug Trends – Methuen, MA

Multijurisdictional Counterdrug Task Force Training (May 6, 2009 - May 7, 2009) Courtroom Testimony – Methuen, MA

DEA Forensic Chemist Seminar (June 21, 2010 - June 25, 2010) Sterling, VA

Bosion	E			0	1				C		
	n	E	D	A	D	7	A.F	E	A.F	7	

DRUG RECEIPT

CC #_	Val
воок# 154	777-74-74-74-74-74-74-74-74-74-74-74-74-
PAGE # 58	
DESTRUCTION #	

Destucia	ID# <u>977</u>	€0
ADDRESS	CITY	STATE
	Pox buty	MA
	Roxbury	MA
	LAB US	SE ONLY
GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER
B		
3 P/B	28,6/2	

The state of the s		
GOOD BEFORE CONTROL OF STATE AND STA		
	GROSS QUANTITY	ROX BUTY ROXBUTY LAB US GROSS QUANTITY WEIGHT

Name and Rank of Submitting Officer Sight	Which	ID#
Received by	Elo o	ate 5-24-1/
	E	CU Control #

```
Der:
          GROSS
                        DATE
                                                                    No. DATE ANALYZED: CITY: BOSTON D.C.U. POLICE OFFICER: P.O. SYBIL WHITE
                        REC'D:
          85/24/2811
         28.612
                                      SUBST: SUB
3 CONT:
NET WT: 20.08
                        Mo. ANALYZED:
                                        "3
C3
                                                                               5/3/11
```

PRELIM: COCCUME (D)

TINDINGSI

DRUG POWDER ANALYSIS FORM

SAMPLE #	_ AGENCY BOSTO . ANALY	φ2 <i>Α</i>
No. of samples tested:	Evidence W	't
PHYSICAL DESCRIPTION:	Gross Wt(3	1: 24-8347
OFF White	ching substruc Gross Will):
		Vt:
	Net V	Vt:
		->
PRELIMINARY TESTS Spot Tests	<u>Microcrystalline</u>	<u>Tests</u>
Cobalt Thiocyanate (̄) →	Gold Chloride <u>+</u>	
Marquis	<u>TLTA (~) →</u>	
Froehde's	OTHER TEST	· <u>·</u>
Mecke's	•••••••••••••••••••••••••••••••••••••••	·

PRELIMINARY TEST RESULTS	GC/MS CONFIRMATO	DRY TEST
RESULTS COCCUSE	RESULTS (Ocav	<u>a</u>
DATE 5-25-11	MS OPERATOR LAG	
,	DATE 5 2)	31

samples tested; 3

#	Gross Weight	Packet Weight	Net Weight	ä	Gross Weight	Packet Weight	Net Weight
1	12.2242	1.5933	13.6612	26			
2	4.2983	1.5809	2.7174	27			
3	2.218-8	1.6010	3.6778	28			
4				29			MARINEMANA SALOGORYO SOOGOGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
5				30			
6				31			
7	***************************************	no (1111 1127)		32			,
8				33			
9				34			
10				35			
11				36			
12				37	L. C. Di Casangongon managangangan		······································
13		•		38			·
14	***************************************			39			11000100000000000000000000000000000000
15			mana ilin 334	40	**************************************		·
16				41			
17			www.durintow.wi.wi.wi.wi.wi.wi.wi.wi.wi.wi.wi.wi.wi	42	····		
18		444		43	hitA950145		
19	•			44			
20				45	······		······································
21			200000000000000000000000000000000000000	46	10000000 00000000000000000000000000000		
22				47		,	Marie de la companya
23				48			
24				49			
25				50			

Calculations:

Wet wt - 20.0564

File Name : J:\05_26_11\789936.D

Operator : ASD

Date Acquired : 27 May 2011 Sample Name : BLANK

Submitted by

: ASD

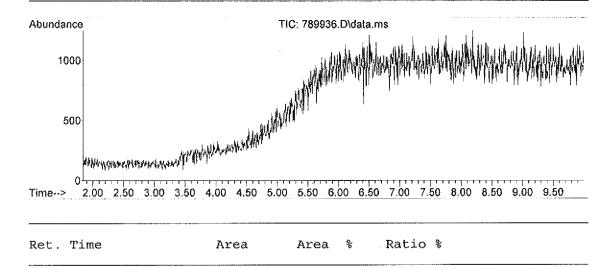
Vial Number

AcquisitionMeth: DRUGS.M

2

Integrator

: RTE



2:04

NO INTEGRATED PEAKS

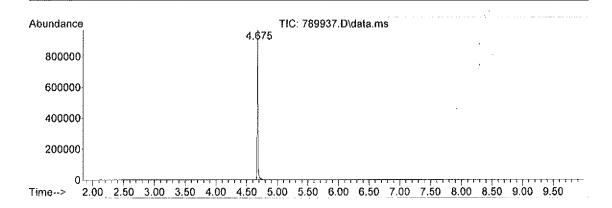
File Name : J:\05_26_11\789937.D

Operator : ASD

Date Acquired : 27 May 2011 2:17

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 15
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.675	900942	100.00	100.00

ANSI)

File Name : J:\05_26_11\789937.D

Operator : ASD

Date Acquired : 27 May 2011

Sample Name : COCAINE STD

Submitted by ASD Vial Number 15 AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

2:17

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS#

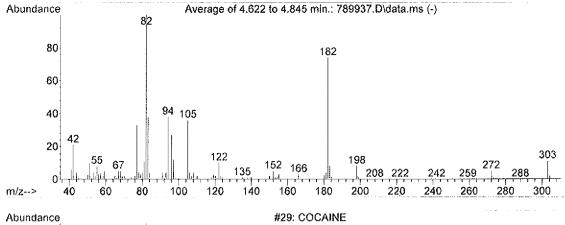
Qual

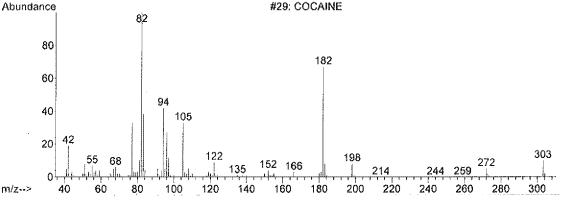
1 4.68 C:\Database\SLI.L

COCAINE

000050-36-2

99





789937.D

Tue Nov 15 10:39:42 2011

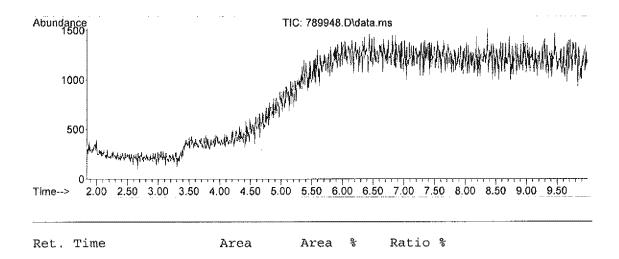
Page

File Name : J:\05_26_11\789948.D

Operator : ASD

Date Acquired : 27 May 2011 4:34

Sample Name : BLANK Submitted by : ASD Vial Number AcquisitionMeth: DRUGS.M : RTE Integrator



NO INTEGRATED PEAKS



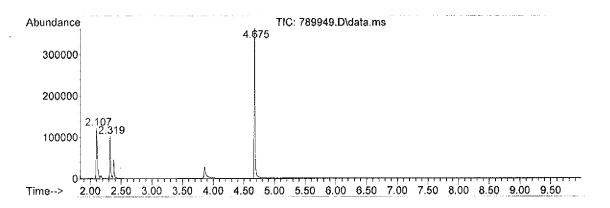
Page 1

File Name : J:\05_26_11\789949.D

Operator : ASD

Date Acquired : 27 May 2011 4:46

Sample Name :
Submitted by : ASD
Vial Number : 49
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.107	169636	25.55	43.36	
2.319	103120	15.53	26.36	
4.675	391188	58.92	100.00	

File Name : J:\05_26_11\789949.D

Operator : ASD

Date Acquired : 27 May 2011 4:46

Sample Name : Submitted by : ASD Vial Number : 49

: ASD : 49

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

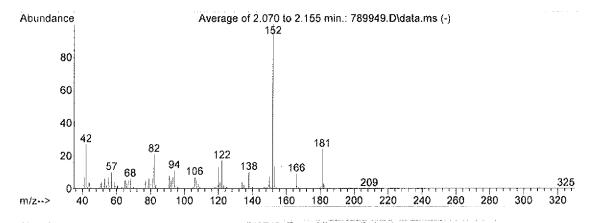
C:\Database\SLI.L

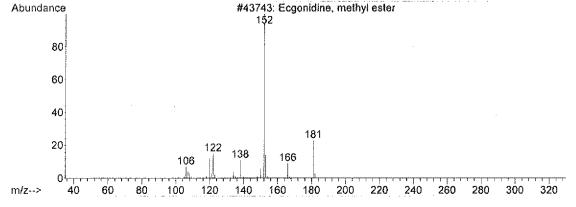
Minimum Quality: 80

C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

Minimum Quality: 80

	PK#	RT	Library/ID	CAS#	Qual
_	1	2.11	C:\Database\NIST05a.L		
			Ecgonidine, methyl ester	127379-24-2	98
			2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	97
			2(1H)-Pyridinone 4-hydroxy-6-methy	007135-82-2	47







File Name : J:\05_26_11\789949.D

Operator : ASD

red : 27 May 2011 4:46

Date Acquired Sample Name

27 May 2011

Submitted by : ASD
Vial Number : 49
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries:

C:\Database\SLI.L

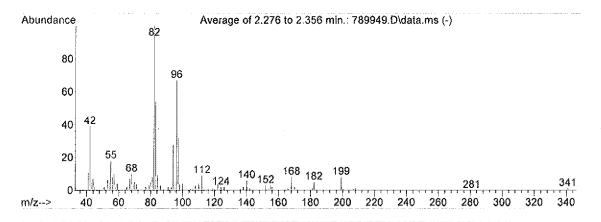
Minimum Quality: 80

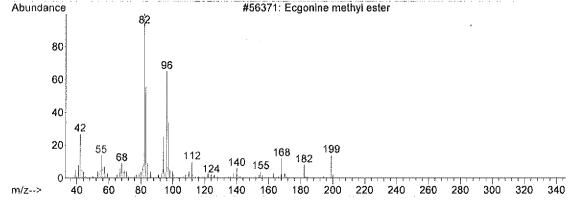
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

Minimum Quality: 80

TATELLE	TAITS	T & la sa a sas - / TT	

PK#	RT	Library/ID	CAS#	Qual
2	2.32	C:\Database\NIST05a.L Ecgonine methyl ester Ecgonine methyl ester Ecgonine methyl ester	106293-60-1 106293-60-1 106293-60-1	97 96 96





Page 3

File Name : J:\05 26 11\789949.D

Operator : ASD

Date Acquired : 27 May 2011 4:46

Sample Name Submitted by ASD Vial Number 49 AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L

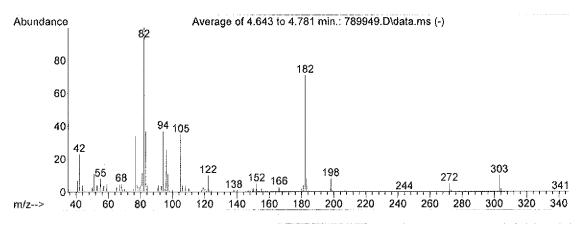
Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

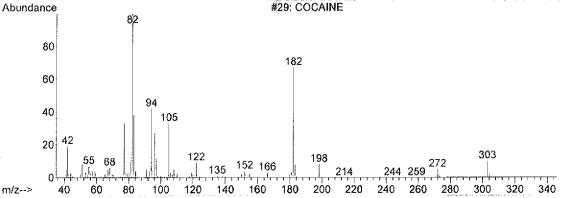
99

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

C:\Database\SLI.L 3 4.68 COCAINE 000050-36-2





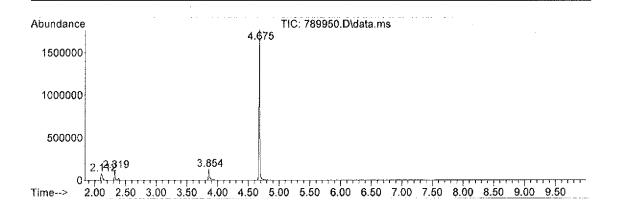
File Name : J:\05_26_11\789950.D

Operator : ASD

Date Acquired : 27 May 2011 4:59

Sample Name :

Submitted by : ASD
Vial Number : 50
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.112	139932	6.02	7.58	
2.319	125504	5.40	6.80	
3.854	215408	9.26	11.67	
4.675	1845151	79.33	100.00	

File Name : J:\05 26 11\789950.D

Operator : ASD

Date Acquired : 27 May 2011 4:59

Sample Name

Submitted by : ASD Vial Number 50 AcquisitionMeth: DRUGS.M : RTE Integrator

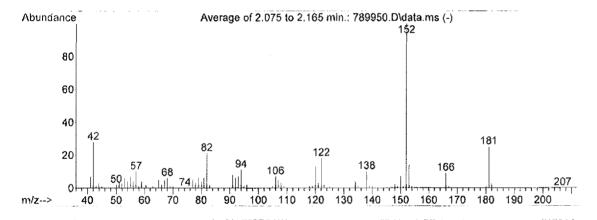
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

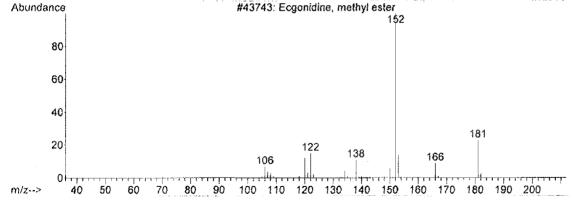
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RT		RT	RT Library/ID		Qual	
	1	2.11	C:\Database\NIST05a.L Ecgonidine, methyl ester	127379-24-2	98	
			2-Carbomethoxy-8-methyl-8-azabicycl		97	
			3,5-Dimethoxyphenethylamine	003213-28-3	43	





File Name : J:\05 26 11\789950.D

Operator : ASD

Date Acquired : 27 May 2011 4:59

Sample Name : Submitted by : ASD

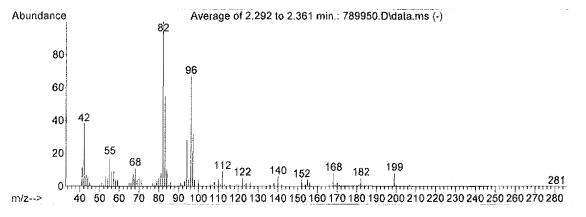
Vial Number : 50 AcquisitionMeth: DRUGS.M Integrator : RTE

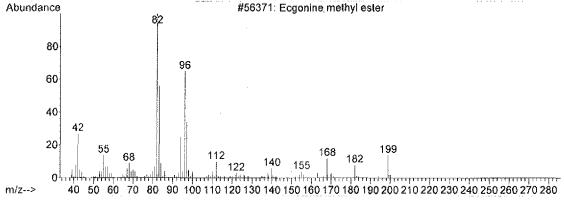
Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

P	K# I	RT Library/ID		Library/ID		CAS#	Qual	
	2 2		:\Database\ Ecgonine me				106293-60-1	98
			Ecgonine me	ethyl (ester		106293-60-1	97
			Ecgonine me	ethyl	ester		106293-60-1	96





789950.D

Tue Nov 15 10:40:09 2011

Page 3



File Name : J:\05_26_11\789950.D

Operator : ASD

Date Acquired 27 May 2011 4:59

Sample Name

Submitted by ASD Vial Number 50 AcquisitionMeth: DRUGS.M Integrator : RTE

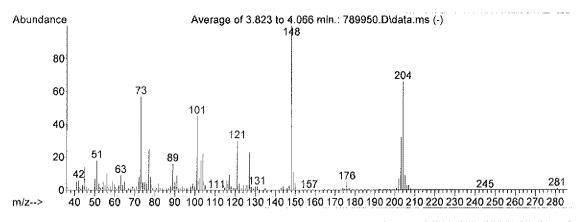
Search Libraries: C:\Database\SLI.L

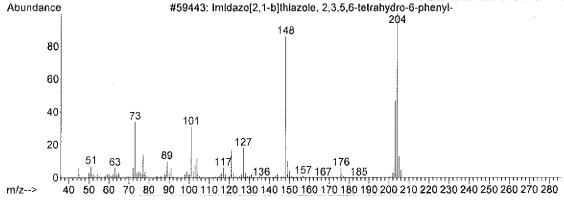
Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80 C:\Database\PMW TOX2.L

PK!	‡ RT	RT Library/ID			Qual	
3	3.85	- (
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98	
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98	
		Imidazo[2,1-b]thiazole.	2,3,5,6-tet	014769-73-4	98	





File Name : J:\05_26_11\789950.D

Operator : ASD

Date Acquired : 27 May 2011 4:59

Sample Name

Submitted by : ASD
Vial Number : 50
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: (

C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK# RT

Library/ID

CAS#

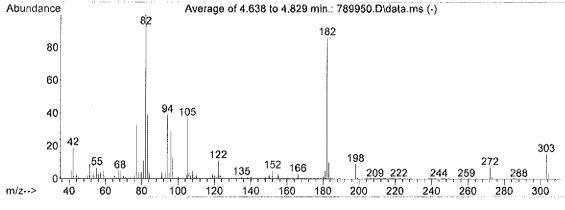
Qual

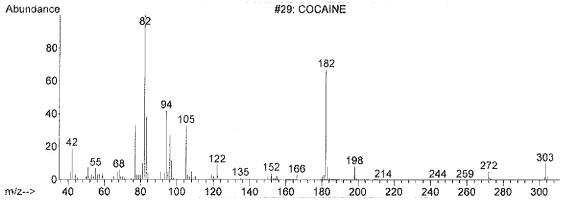
4 4.68 C:\Database\SLI.L

COCAINE

000050-36-2

99







File Name ; J:\05_26_11\789951.D

Operator : ASD

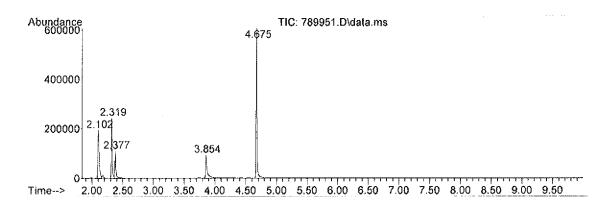
Date Acquired : 27 May 2011 5:11

Sample Name :

Submitted by : ASD Vial Number : 51

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.102	288185	19.95	46.44	
2.319	239040	16.55	38.52	
2.377	128696	8.91	20.74	
3.854	167966	11.63	27.07	
4.675	620529	42.96	100.00	



File Name : J:\05_26_11\789951.D

Operator : ASD

Date Acquired 27 May 2011 5:11

Sample Name

Submitted by ASD Vial Number 51 AcquisitionMeth: DRUGS.M : RTE Integrator

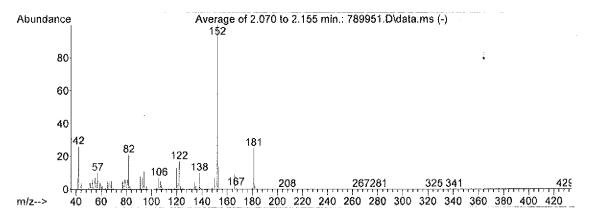
Search Libraries:

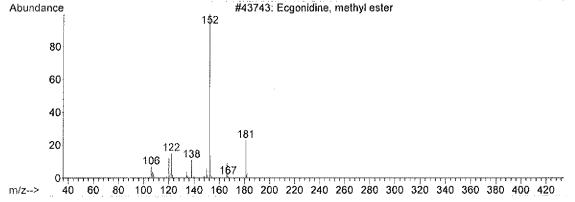
Minimum Quality: 80 Minimum Quality: 80 C:\Database\SLI.L

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	2.10	C:\Database\NIST05a.L	÷ .	
		Ecgonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	97
		2(1H)-Pyridinone, 4-hydroxy-6-methy	007135-82-2	38







File Name : J:\05_26_11\789951.D

Operator : ASD

Date Acquired : 27 May 2011 5:11

Sample Name : | Submitted by :

Submitted by : ASD Vial Number : 51 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

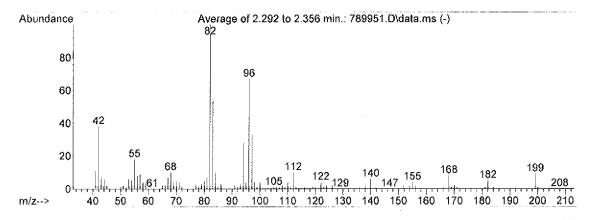
Minimum Quality: 80

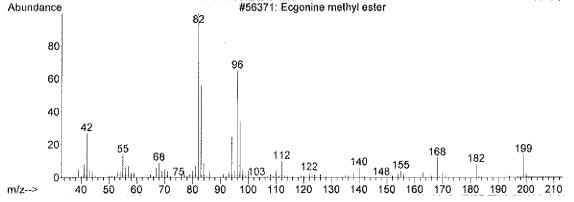
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK	# RT	Library/ID	CAS#	Qual
2	2.32	C:\Database\NIST05a.L Ecqonine methyl ester	106293-60-1	97
		Pseudoecgonine methyl ester Ecgonine methyl ester	099189-88-5 106293-60-1	96 96







File Name : J:\05_26_11\789951.D

Operator : ASD

Date Acquired 27 May 2011 5:11

Sample Name Submitted by ASD Vial Number 51 AcquisitionMeth: DRUGS.M Integrator : RTE

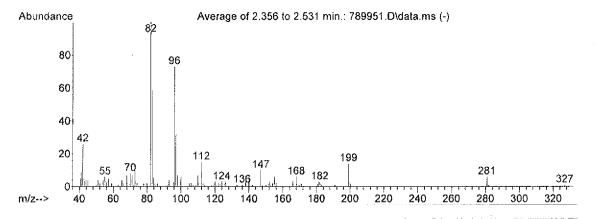
Search Libraries: C:\Database\SLI.L

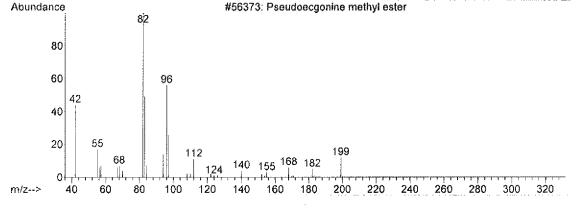
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
3	2.38	C:\Database\NIST05a.L Pseudoecgonine methyl ester Ecgonine methyl ester Ecgonine methyl ester	099189-88-5 106293-60-1 106293-60-1	93 93 93





File Name : J:\05_26_11\789951.D

Operator : ASD

Date Acquired : 27 May 2011 5:11

Sample Name :

Submitted by : ASD
Vial Number : 51
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries:

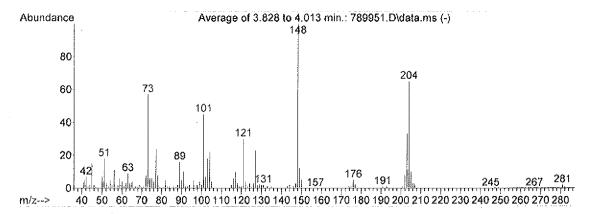
C:\Database\SLI.L

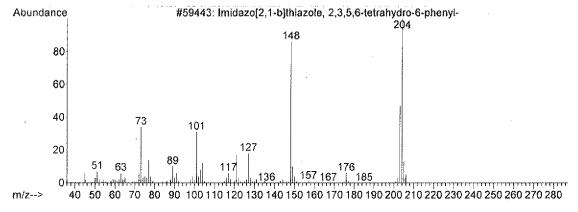
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

PK#		RT	Library/ID		CAS#	Qual	
	4	3 , 85	C:\Database\NIST05a.L				
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98	
			Imidazo[2,1-b]thiazole,	2,3,5,6-tet	006649-23-6	98	
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	98	





Alls)

File Name : J:\05_26_11\789951.D

Operator : ASD

Date Acquired 27 May 2011

Sample Name

5:11

Submitted by Vial Number 51

ASD

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RT Library/ID

CAS#

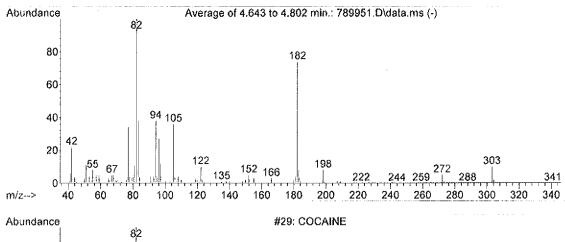
Qual

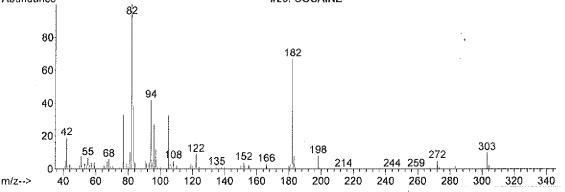
5 4.68 C:\Database\SLI.L

COCAINE

000050-36-2

99



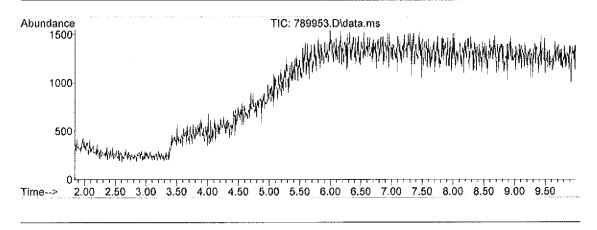


File Name : J:\05 26 11\789953.D

Operator : ASD

Date Acquired : 27 May 2011 5:36

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

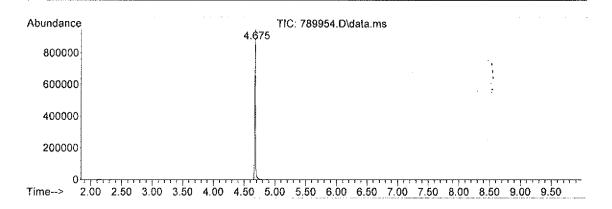
File Name : J:\05_26_11\789954.D

Operator : ASD

Date Acquired : 27 May 2011 5:49

Sample Name : COCAINE STD

Submitted by : ASD Vial Number : 15 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.675	871526	100.00	100.00



File Name : J:\05_26_11\789954.D

Operator : ASD

Date Acquired : 27 May 2011 5:49

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 15
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80
Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

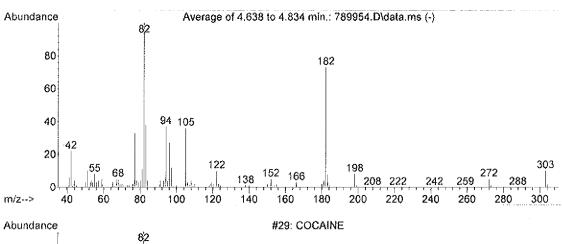
PK# RT Library/ID CAS# Qual

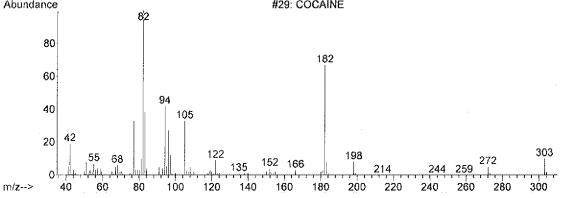
1 4.68 C:\Database\SLI.L

COCAINE

000050-36-2

99





789954.D

Tue Nov 15 10:40:36 2011

Page 2

